JOURNAL OF ELECTROANALYTICAL CHEMISTRY AND INTERFACIAL ELECTROCHEMISTRY

Vol. 312 Nos. 1 and 2 26 August 1991

CONTENTS

Solutions for the E mechanism in double potential step experiments
J.W. Wilder (Morgantown, WV, USA), S.L. Cole, D.A. Aikens and H.B. Hollinger (Troy, NY, USA) 1

Reactant solvation and kinetics of simple charge-transfer electrode reactions in mixed solvents
W. Górski and Z. Galus (Warsaw, Poland) 27

Computer analysis on natural convection in thin-layer thermocells with a soluble redox couple. Part 2. *E–I* relation, electric power, heat flux and electrochemical heat pump
T. Ikeshoji (Sendai, Japan), F.N. Bravo de Nahui (Campina Grande, Brazil), S. Kimura and M. Yoneya (Sendai, Japan) 43

Mechanism of photocurrent and photovoltage in solar cells using n-silicon electrodes in non-aqueous solutions
H. Kobayashi, J. Ono, T. Ishida, M. Okamoto, H. Kawanaka and H. Tsubomura (Osaka, Japan) 57

Cyclic voltammetric wave-shapes for microdisk electrodes: coupled effects of solution resistance, double-layer capacitance, and finite electrochemical kinetics
L.K. Safford and M.J. Weaver (West Lafayette, IN, USA) 69

Probing the chemical stability of an electrically conductive material as a function of the degree of band filling. Electrochemical characterization of μ-oxo-(tetra-t-butylphthalocyaninato)-germanium
L.F. LeBlevenec (East Lansing, MI, USA) and J.G. Gaudiello (Endicott, NY, USA) 97

Structural effects in electrocatalysis. Ethylene glycol oxidation on platinum single-crystal surfaces
N.M. Marković, M.L. Avramov-Ivić, N.S. Marinkovic and R.R. Adžic (Belgrade, Yugoslavia) ... 115

Electrochemistry of xanthine oxidase at glassy carbon and mercury electrodes
C.G. Rodrigues, A.G. Wedd (Bundoora, Australia) and A.M. Bond (Geelong, Australia) 131

The cathodic cleavage of the nitrobenzenesulfonyl group from aliphatic amines in *N,N*-dimethylformamide
M.V.B. Zanoni (Araraquara, Brazil) and N.R. Stradiotto (Ribeirão Preto, Brazil) 141

A kinetic study of the catalysed oxidation of 1′,3-dimethylferrocene ethylamine by cytochrome *c* peroxidase
J.M. Cooper (Glasgow, UK), J.V. Bannister (Bedford, UK) and C.J. McNeil (Newcastle upon Tyne, UK) 155

A re-formulation of the Wagner and Traud additivity principle: catalytic and electrochemical experiments with iodide modified surfaces
A.M. Creeth and M. Spiro (London, UK) 165

Radiochemical measurements of tritium during heavy water electrolysis at palladium cathodes in closed cells
D.A. Corrigan, B.K. Schwemmin and E.W. Schneider (Warren, MI, USA) 175

Periodic and aperiodic current oscillations induced by the presence of chloride ions during electrodissolution of a cobalt electrode in sulphuric acid solutions
D. Sazou and M. Pagitsas (Thessaloniki, Greece) 185

Electrochemical evidence of two-dimensional surface compounds of heterocyclic molecules at sulphur-covered gold and platinum. Part I. Methylene blue
V. Svetličić (Zagreb, Yugoslavia), J. Clavilier (Meudon, France), V. Žutić (Zagreb, Yugoslavia) and J. Chevalet (Paris, France) 205

Pattern morphologies in zinc electrodeposition
P.P. Trigueros, J. Claret, F. Mas and F. Sagués (Barcelona, Spain) 219

Perchlorate adsorption on polycrystalline gold electrodes in aqueous perchloric acid
Z. Borkowska and U. Stimming (New York, NY, USA) 237

Adsorption of 2-thiouracil at the mercury/electrolyte interface
Th. Wandlowski (Halle, Germany) 245

(continued on p. 3 of cover)

Contents (*continued*)

Short communications

Electrochemical growth of spherical clusters under joint ohmic, diffusion and ion-transfer limitations
A. Milchev (Sofia, Bulgaria) 267

Tetrathienylsilane as a precursor of highly conducting electrogenerated polythiophene
J. Roncali (Thiais, France), A. Guy, M. Lemaire, R. Garreau and A.H. Huynh (Paris, France) .. 277

Preliminary notes

Polypyrrole electrogeneration at different potentials "Ex situ" microgravimetric control
T.F. Otero and C. Santamaria (San Sebastian, Spain) 285

Electrochemical STM on condensed guanine on graphite
R. Srinivasan, J.C. Murphy, R. Fainchtein (Laurel, MD, USA) and N. Pattabiraman (Washington, DC, USA) 293

Weakening of the hole injection effect proceeding from the reduction of ceric species after oxidation of indium phosphide compounds
E.M. Khoumri, A. Etcheberry, C. Debiemme-Chouvy, D. Le Roy, O. Poliakoff and J.L. Sculfort (Meudon, France) 301

Book review 309

Author index 311

Subject index 312

JOURNAL OF ELECTROANALYTICAL CHEMISTRY AND INTERFACIAL ELECTROCHEMISTRY and BIOELECTROCHEMISTRY AND BIOENERGETICS

Publication schedule for 1991 (please note that Vol. 287, belonging to the 1990 subscription, appeared in 1991)

Month	J	F	M	A	M	J	J	A	S	O	N	D
J. Electroanal. Chem.	297/1 297/2	300/ 1+2 301/ 1+2	302/ 1+2 303/ 1+2	304/ 1+2 305/1	305/2 306/ 1+2	307/ 1+2 308/ 1+2	309/ 1+2 310/ 1+2	311/ 1+2 312/ 1+2	313/ 1+2 314/ 1+2	315/ 1+2 316/ 1+2	317/ 1+2 318/ 1+2	319/1 319/2
Bioelectrochem. Bioenerg.		320/1 (25/1)		320/2 (25/2)		320/3 (25/3)		321/1 (26/1)		321/2 (26/2)		321/3 (26/3)